Operations Committee Update - Advanced Meter Infrastructure

Mike Jensen

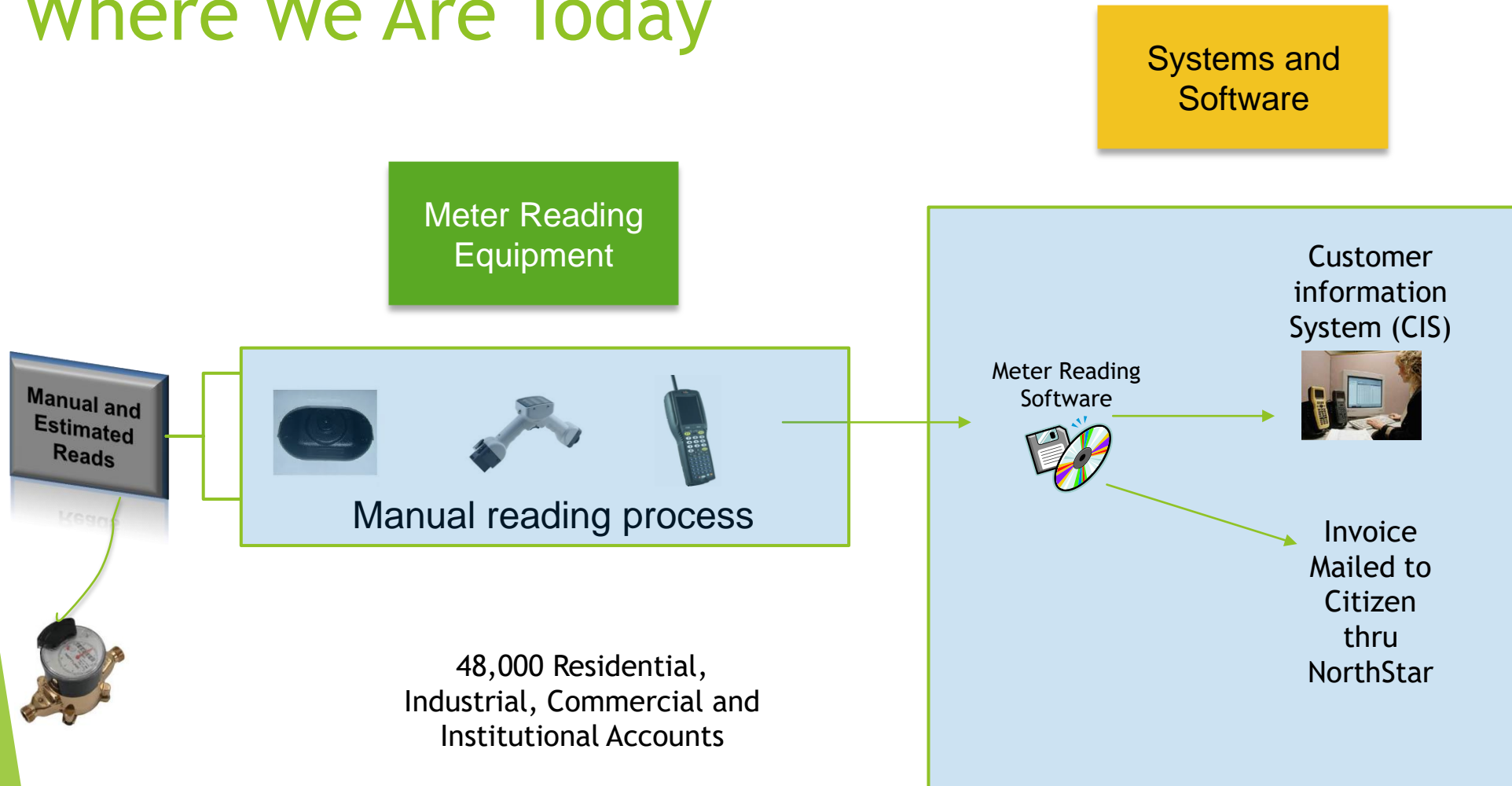Director, Water/Wastewater Treatment & Compliance

Update on AMI

Today's discussion will;

1. Highlight where we are today;
2. Highlight the benefits of AMI;
3. Define the Scope, Schedule and Budget;
4. Provide a status update.

Where We Are Today

Systems and Software

Meter Reading Equipment

Manual and Estimated Reads

Manual reading process

48,000 Residential, Industrial, Commercial and Institutional Accounts

Meter Reading Software

Customer information System (CIS)

Invoice Mailed to Citizen thru NorthStar

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Where We Are Today

1. Manual and Estimated Reads
2. No web access
3. Many high bill complaints
   - 18 month period 43 "high bill" complaints
   - $37,000 total, $750 average
4. No leak detection
5. Burdensome final reads
6. No water meter damage protection
7. Cumbersome financial reporting
8. Unable to "water balance"

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What was recommended to Council

A business case to Council in 2018 showed AMI would;

1. Provide significant benefits

2. Connect business drivers

3. Provide improvements to

   ▶ Water distribution management

   ▶ Customer service

   ▶ Efficiencies.

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Council asked us to report back on

1. Implementation of system on all 48,000 residential and ICI accounts

2. Implement our own custom Meter Analytics software

3. Citizens have online access, the ability to review and initiate service requests
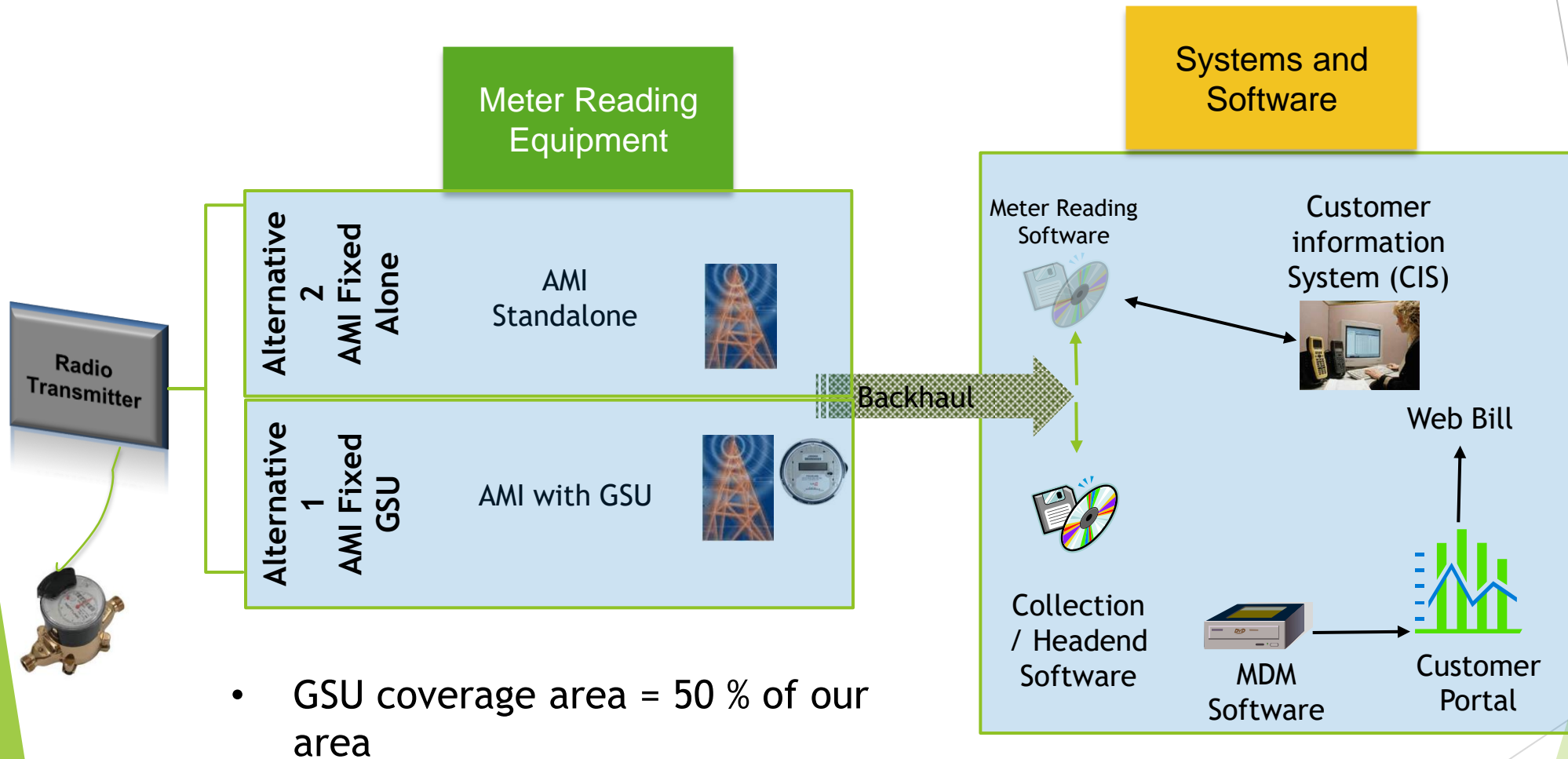
Continued…

Council asked us to report back on

4. Clearly define;
   - ▶ Meter replacement needs
   - ▶ Implementation of AMI system, water meters and installation
   - ▶ External project support
   - ▶ Internal project support

5. Full implementation of AMI in 36 months

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Strategic Plan Alignment

1. Asset Management and Renewal
2. Business Attraction, Development and Retention
3. Climate Change
4. Growing Our Entire Economy and Economic Capacity
5. Housing
6. Creating a Healthier Community

AMI Overview

- GSU coverage area = 50 % of our area

Business Case

Business Case	Procurement	Start Up	Proof of Concept	Installation / Deployment	Close Out

- Project has taken a phased approach
- Gaining approvals as we step through the process
- Business Case defines:
  - Project budget
 - Scope/timeline
  - Key business drivers

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Business Drivers
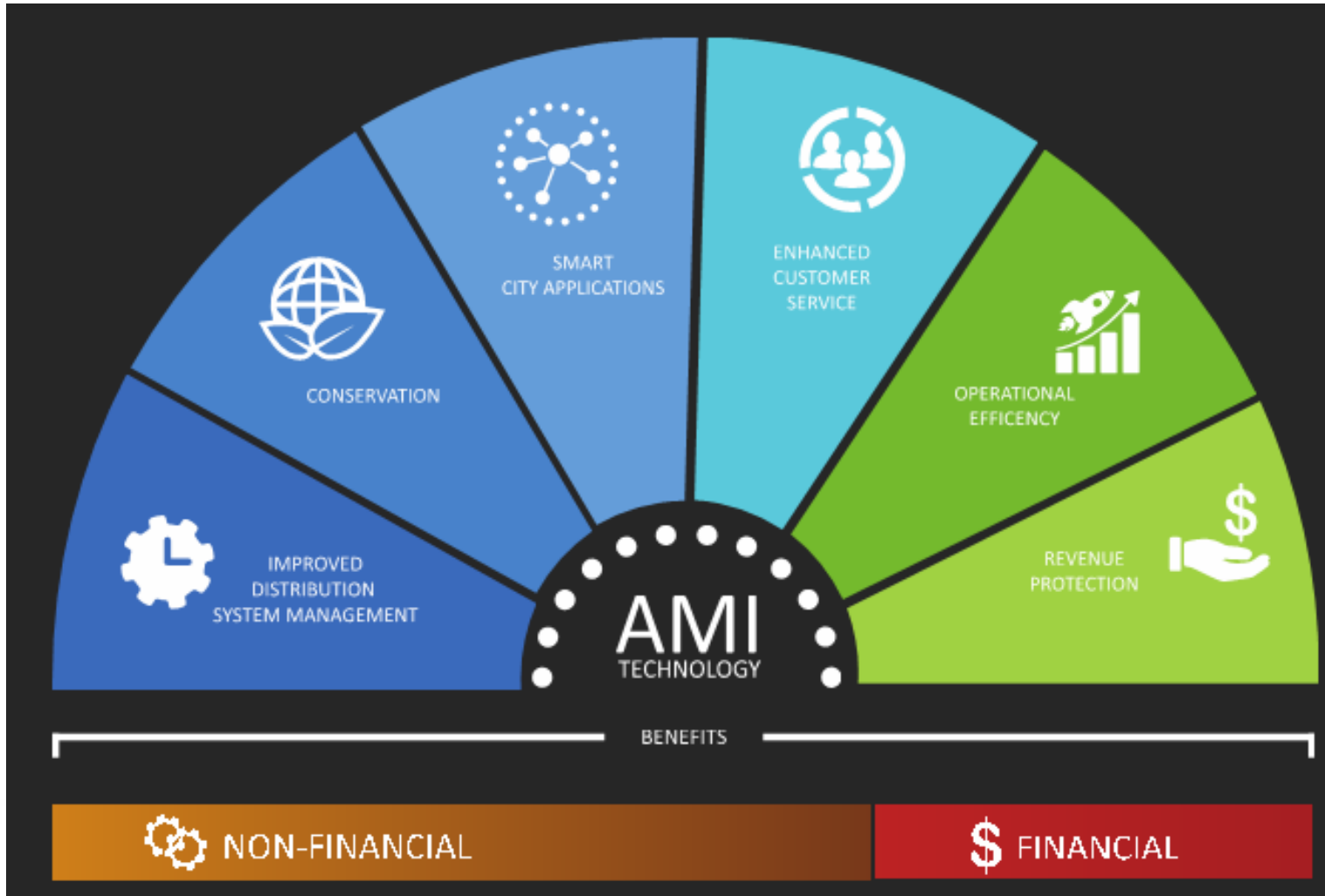
- Drivers that will benefit CGS

- Payback between 9-10 years

Enhanced Customer Service
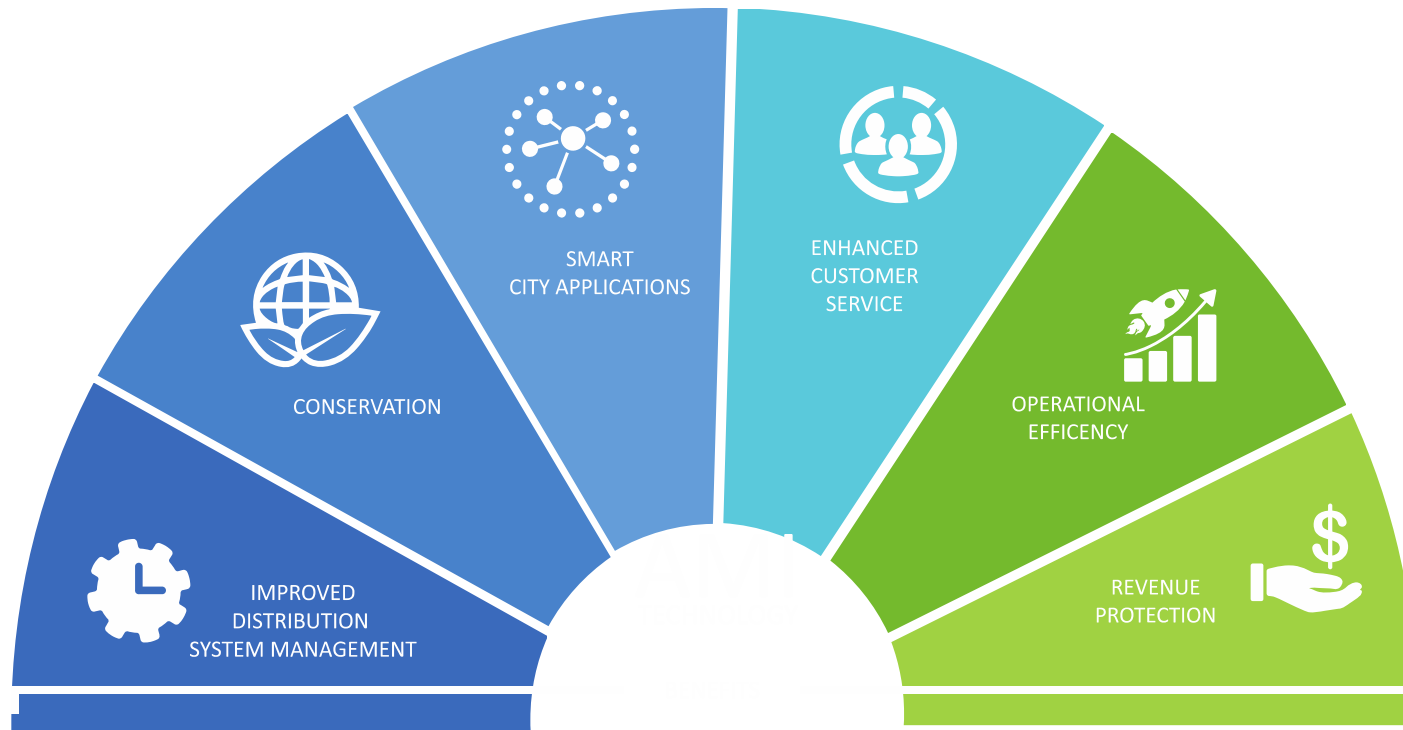
- Eliminate estimated bills
- Customer web access to consumption data and alerts
- Better handling of high bill complaints
- Customer side leak detection

Improve Meter Reading Reliability
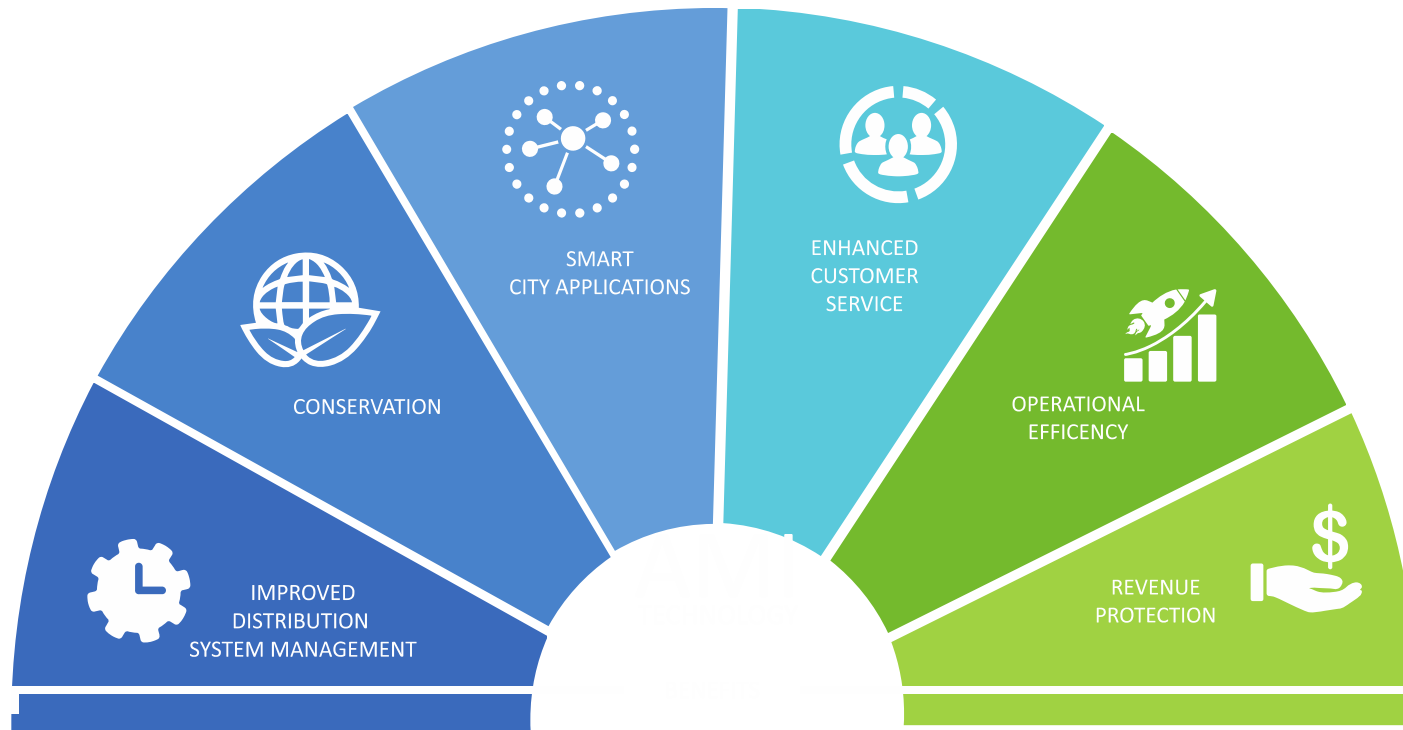
- Eliminate manual reading costs
- Reduce reading exceptions and reliability issues
- Expedites same day special reads
- Minimize high/low field visits
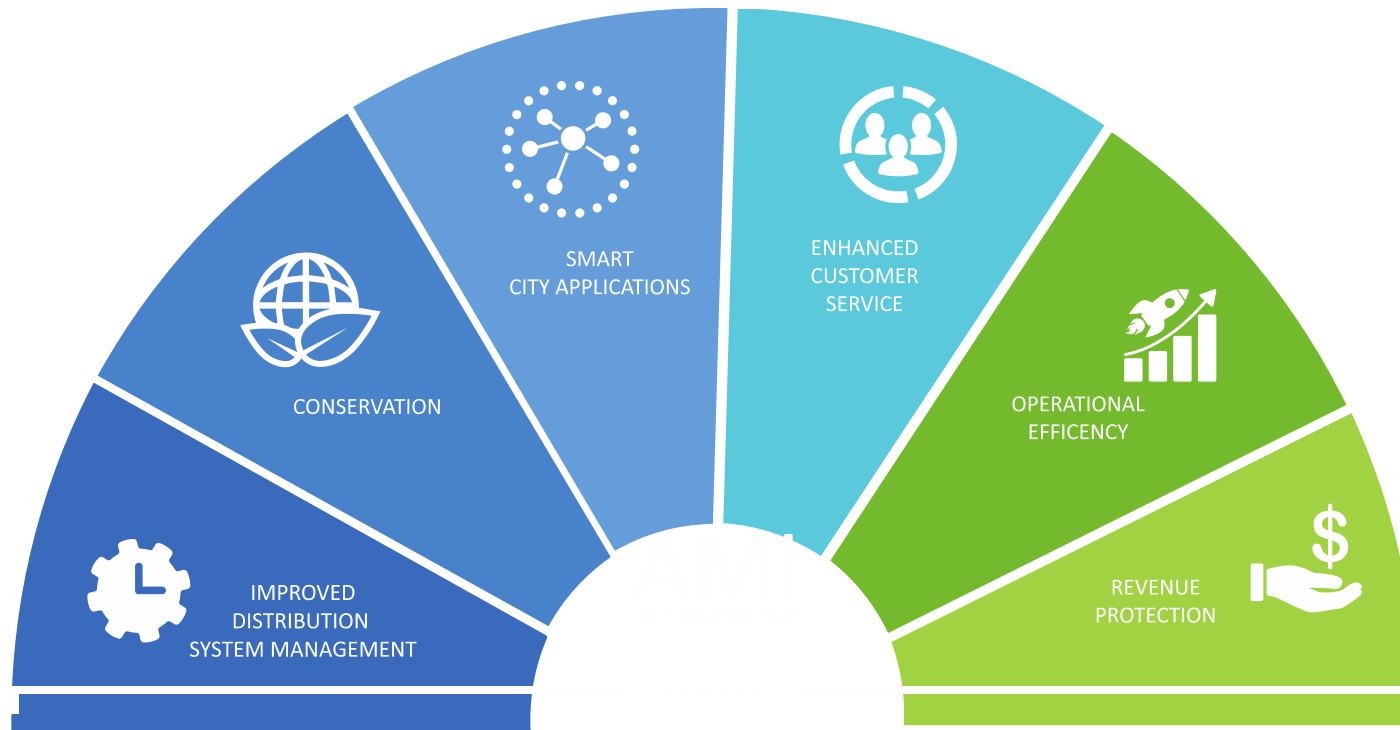- Reduce frozen meter and operational repair time

Revenue Protection
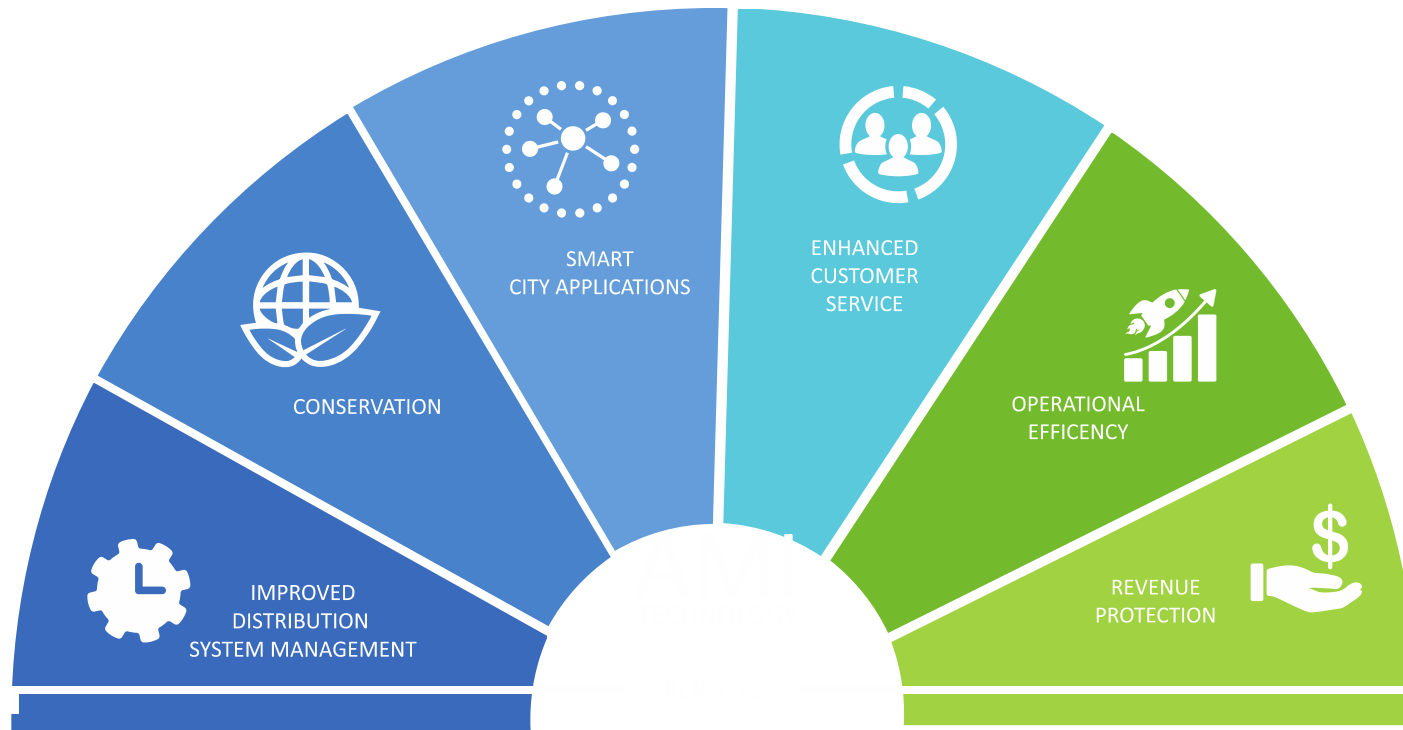
Accuracy & Completeness

- Detect water meter damage sooner
- Improve water meter accuracy
- Improve financial reporting

Distribution Management

CONSERVATION

SMART CITY APPLICATIONS

ENHANCED CUSTOMER SERVICE

OPERATIONAL EFFICENCY

IMPROVED DISTRIBUTION SYSTEM MANAGEMENT
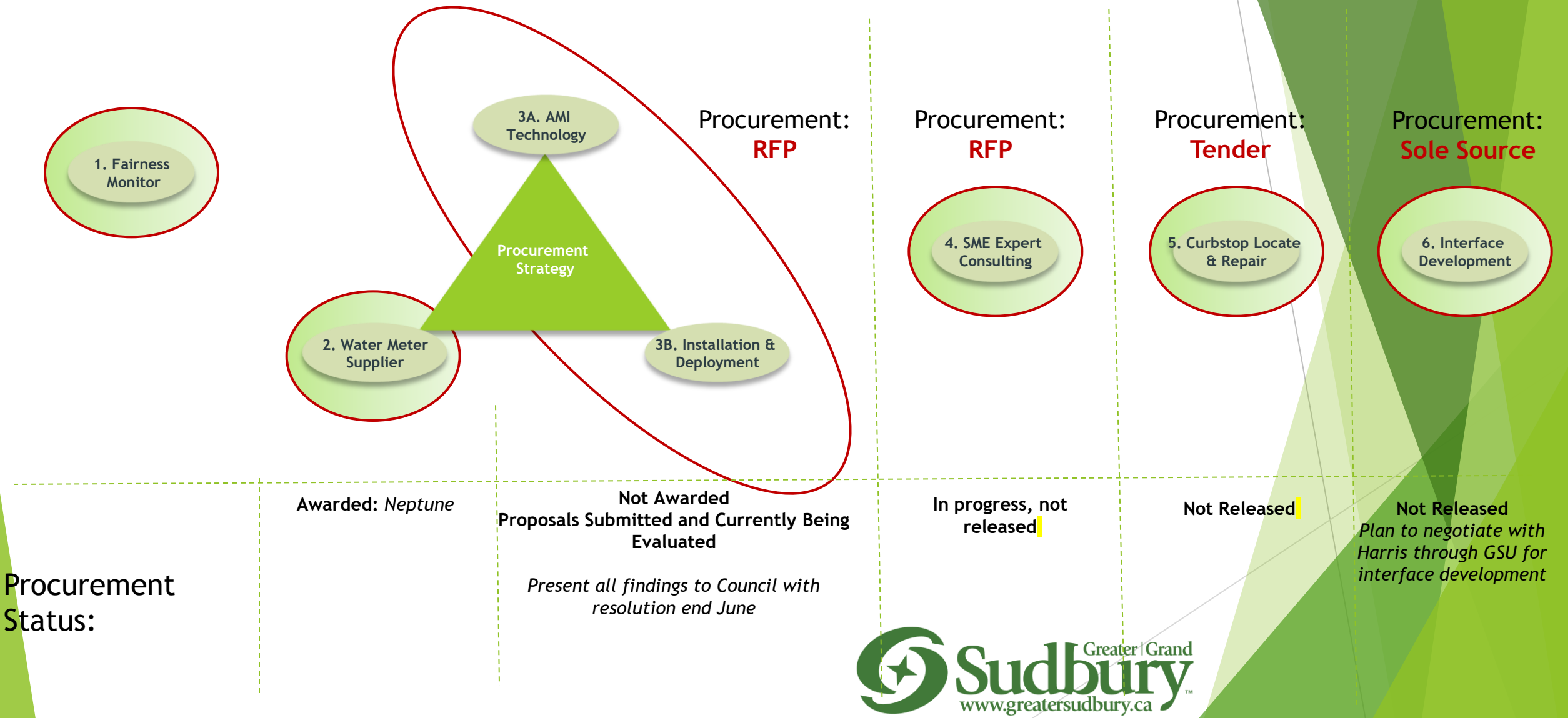
REVENUE PROTECTION

- Be able to create DMA on small system to better handle water loss
- Prioritize systems upgrades based on system water loss
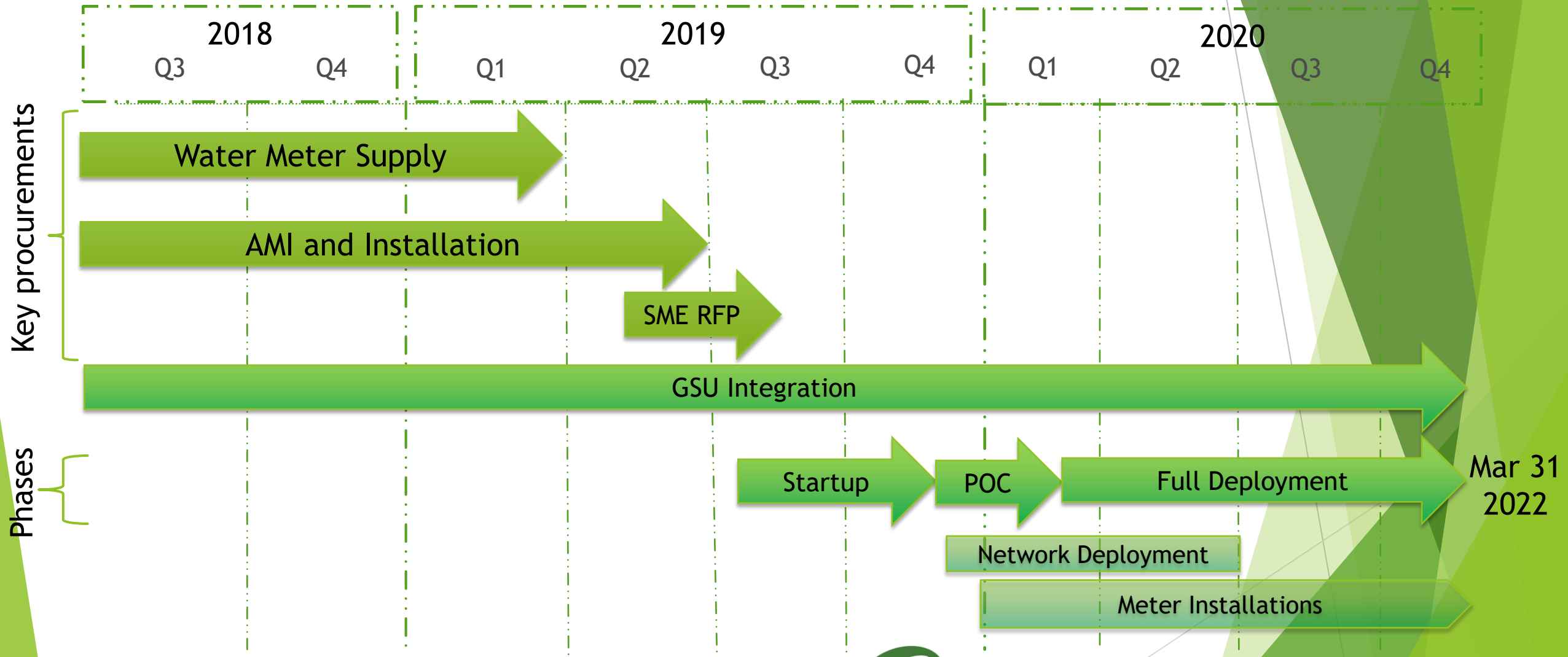- Improved consumption recognition

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Societal Benefits / Conservation
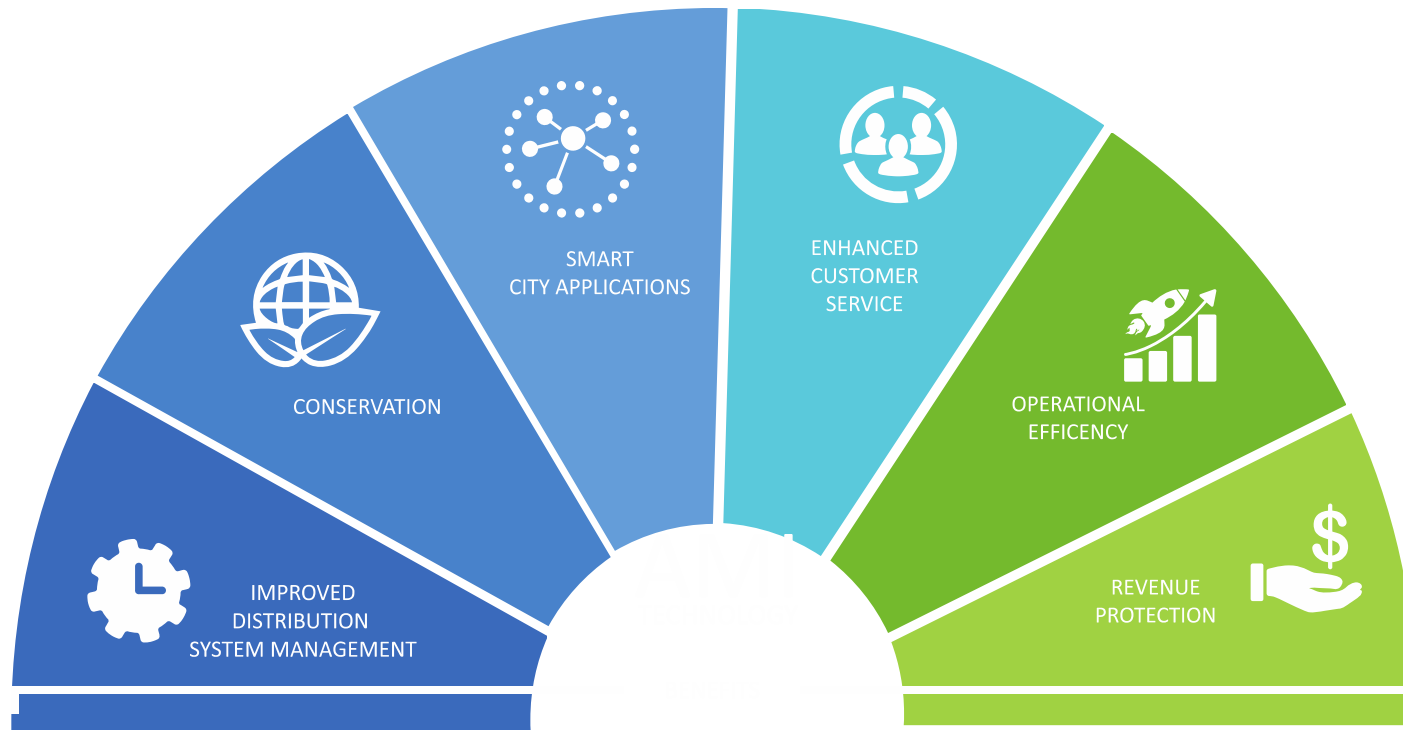
- Reduce energy use for water treatment
- Reduce other programs related to conservation.

Project Phases

Recap

- Procurement process in progress
    - Vendor selected
    - AMI system and installation RFP being evaluated
    - Preparing RFP for SME for contract delivery

- Report to Council in June

- Program Management (Sept 2019 – March 2022)